



NS104D1C1\_seqlisting\_061606

SEQUENCE LISTING

<110> Palese, Peter  
Garcia-Sastre, Adolfo

<120> RECOMBINANT NEGATIVE STRAND RNA VIRUS  
EXPRESSION SYSTEMS AND VACCINES

<130> 26-003700US

<140> 09/396,539

<141> 1999-09-14

<150> 09/106,377

<151> 1998-06-29

<150> 08/252,508

<151> 1994-06-01

<160> 71

<170> FastSEQ for windows Version 4.0

<210> 1

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<212> DNA

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<220>

<223> Primer for rescue of the mutant NA gene into virus particles

<400> 1

tacgaggaaa tggtcctgtt a

21

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<211> 19

<212> PRT

<213> Influenza virus

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Gln Leu Val Trp Met Ala Cys Asn Ser Ala Ala Phe Glu Asp Leu Arg

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Val Leu Ser

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<211> 16

<212> PRT

<213> Influenza virus

<220>

<223> epitope within the NP protein

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Thr Tyr Gln Arg Thr Arg Gln Leu Val Arg Leu Thr Gly Met Asp Pro

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<211> 95

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<212> DNA

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<220>

<223> Primer for construction of plasmid pV-wt

<400> 4

gaagcttaat acgactcact ataagtagaa acaagggtgt tttttcatat catttaaact 60  
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<223> Primer for construction of plasmid pM-wt

<400> 5

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<211> 68

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<223> Primer for construction of plasmid pV-d5'

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<210> 7

<211> 60

<212> DNA

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<223> Primer for construction of plasmid pV-d5'

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<211> 42

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<213> Artificial Sequence

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<223> Primer for construction of plasmid pHgANS

<400> 8

ccgaattctt aatacgactc actataagta gaaacaaggg tg 42

<210> 9

<211> 30

<212> DNA

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<223> Primer for construction of plasmid pHgANS

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<210> 10  
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<220>  
<223> Primer for generating point mutations in promoter sequence

<400> 11  
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<210> 15  
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<211> 16

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<223> Primer for generating point mutations in promoter sequence

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16

<210> 18

<211> 16

<212> RNA

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<223> Primer for generating point mutations in promoter sequence

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cacccuuguu uuacu

16

<210> 19

<211> 16

<212> RNA

<213> Artificial Sequence

<220>

<223> Primer for generating point mutations in promoter sequence

<400> 19

cacccuuguu ucuacu

16

<210> 20

<211> 96

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer

<400> 20

ctagacgccc tgcagcaaaa gcagggtgac aaagacataa tggagaaaaa aatcactggg 60  
tataccaccg ttgatatatc ccaatcgcat cgtaaa 96

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<210> 21  
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 <223> Primer for generating flanking sequences of NS RNA to fuse with the coding sequence of the CAT gene  
  
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 ttatgtcttt gtcaccctgc ttttgctgca gggcgt 96  
  
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 <223> Primer for generating flanking sequences of NS RNA to fuse with the coding sequence of the CAT gene  
  
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 <210> 23  
 <211> 38  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Primer for construction of plasmid pIVACAT1  
  
 <400> 23  
 ctagatctat tacgccccgc cctgccactc atcgcagt 38  
  
 <210> 24  
 <211> 34  
 <212> DNA  
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 <223> Primer  
  
 <400> 24  
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 <210> 25  
 <211> 38  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Primer for generating flanking sequences of NS RNA to fuse with the coding sequence of the CAT gene  
  
 <400> 25  
 ctagatctat tacgccccgc cctgccactc atcgcagt 38  
  
 <210> 26  
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<213> Artificial Sequence

<220>

<223> Primer for construction of plasmid pIVACAT1

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<210> 27

<211> 96

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer for construction of plasmid pIVACAT1

<400> 27

gttcctttacg atgcgattgg gatatatcaa cggtgggtata cccagtgtatt tttttctcca 60  
ttatgtcttt gtcaccctgc ttttgctgca gggcgt 96

<210> 28

<211> 30

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer for construction of pT3NAV

<400> 28

cggaattctc ttcgagcgaa agcaggagtt 30

<210> 29

<211> 51

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer for construction of pT3NAV mut 2

<400> 29

catgggtgag tttcgaccaa aatctagatt ataaaatagg atacatatgc a 51

<210> 30

<211> 51

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer

<400> 30

catgggtgag tttcgaccaa aatctagatt ataaaatagg atacatatgc a 51

<210> 31

<211> 43

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer for construction of pT3NAV mut 2

<400> 31

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aatgtatcct attttataat ctagattttg gtcgaaactc acc 43

<210> 32  
 <211> 24  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Primer for construction of pT3NA/BIP

<400> 32  
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<210> 33  
 <211> 22  
 <212> DNA  
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<220>  
 <223> Primer for construction of pT3NA/BIP

<400> 33  
 gcgctggcca tcttgccagc ca 22

<210> 34  
 <211> 17  
 <212> DNA  
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<220>  
 <223> Primer for construction of pT3NA/BIP-CAT

<400> 34  
 agaaaaaat cactggg 17

<210> 35  
 <211> 17  
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<220>  
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<400> 35  
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<210> 36  
 <211> 23  
 <212> DNA  
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<220>  
 <223> Primer for construction of pT3BIP-NA

<400> 36  
 gcgcatcgat aggtcgacgc cgg 23

<210> 37  
 <211> 55  
 <212> DNA  
 <213> Artificial Sequence

<220>

<223> Primer for construction of pT3BIP-NA

<400> 37  
ggccatcgat ccaatgggta ttattttctg gtttggattc atcttgccag ttggg 55

<210> 38  
<211> 91  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Primer for construction of pT3GP2/BIP-NA (L-primer)

<400> 38  
atgactggat ccgctagcat ggccatcatt tatctcattc tcctgttcac agcagtgaga 60  
ggggaccaga tagaagaatc gcaaaaccag c 91

<210> 39  
<211> 39  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Primer for construction of pT3GP2/BIP-NA (M-primer)

<400> 39  
atgacagaat tcgtcgactt atctattcac tacagaaag 39

<210> 40  
<211> 53  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Primer for construction of pT3GP2/BIP-NA

<400> 40  
gcgcgaaagac gcagcaaaag caggagtta agctagcatg gccatcattt atc 53

<210> 41  
<211> 38  
<212> DNA  
<213> Artificial Sequence

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<223> Primer for construction of pT3HGP2/BIP-NA

<400> 41  
cgatggatcc gctagcttgg aatcgatggg ggtgtatc 38

<210> 42  
<211> 37  
<212> DNA  
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<220>  
<223> Primer for construction of pT3HGP2/BIP-NA

<400> 42  
atcgatgaat tcgtcgactc agatgcatat tctgcac 37

<210> 43  
<211> 51



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<212> DNA  
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<220>  
 <223> Primer for construction of pT3HGP2/BIP-NA

<400> 43  
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<210> 44  
 <211> 28  
 <212> DNA  
 <213> Influenza A virus

<400> 44  
 gcgcgaattc tcttcgagca aaagcagg 28

<210> 45  
 <211> 18  
 <212> DNA  
 <213> Influenza virus

<220>  
 <223> Position 243-226 of the NA gene

<400> 45  
 agagatgaat tgccggtt 18

<210> 46  
 <211> 6  
 <212> PRT  
 <213> Human Immunodeficiency Virus-1 (HIV-1)

<400> 46  
 Glu Leu Asp Lys Trp Ala  
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<210> 47  
 <211> 12  
 <212> RNA  
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<220>  
 <223> Primer

<400> 47  
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<210> 48  
 <211> 22  
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<220>  
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<400> 48  
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<210> 49  
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<213> Influenza A virus

<400> 49  
aguagaaaca aggguguuuu uucauaucau uuaacuucac ccugcuuuug cu 52

<210> 50

<211> 53

<212> RNA

<213> Influenza A virus

<400> 50  
agcaaaagca gggugaagu uaaaugauau gaaaaaacac ccuuguuucu acu 53

<210> 51

<211> 30

<212> RNA

<213> Influenza A virus

<400> 51  
agaucuaaua aacuucaccc ugcuuuugcu 30

<210> 52

<211> 43

<212> RNA

<213> Artificial Sequence

<220>

<223> Primer for generate mutagenesis sequence within viral gene segments

<400> 52  
aguagaaaca aggguguuuu uucagauca uuacgccccg ccc 43

<210> 53

<211> 15

<212> RNA

<213> Artificial Sequence

<220>

<223> Primer for construction of WSN NA gene in pT3NAV plasmid

<400> 53  
aguagaaaca aggag 15

<210> 54

<211> 14

<212> RNA

<213> Artificial Sequence

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<223> Primer for construction of WSN NA gene in pT3NAV plasmid

<400> 54  
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<210> 55

<211> 12

<212> RNA

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<223> Primer for construction of WSN NA gene in pT3NAV plasmid

<400> 55

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ccugcuuucg cu 12

<210> 56  
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<210> 57  
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<400> 57  
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<400> 58  
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<210> 59  
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<400> 59  
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<210> 60  
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<220>  
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<400> 60  
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<210> 61  
 <211> 53  
 <212> RNA  
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<220>

# NS104D1C1\_seqlisting\_061606

<223> Primer for construction of WSN NA gene in pT3NAV plasmid

<400> 61  
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<210> 62

<211> 96

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer

<400> 62  
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tataccaccg ttgatataatc ccaatcgcat cgtaaa 96

<210> 63

<211> 42

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer for construction of pT3NAV

<400> 63  
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<210> 64

<211> 40

<212> DNA

<213> Artificial sequence

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<223> Oligonucleotide

<400> 64  
tgggtatacc accgttgata tatcccaatc gcatcgtaaa 40

<210> 65

<211> 52

<212> DNA

<213> Artificial sequence

<220>

<223> Oligonucleotide

<400> 65  
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<210> 66

<211> 53

<212> RNA

<213> Artificial sequence

<220>

<223> Transcribed V-wt template

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<210> 67

<211> 53

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<212> RNA  
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 <223> Transcribed M-wt template  
  
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 <223> Linker sequence  
  
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 <210> 69  
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 <212> RNA  
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 <223> Transcribed CAT gene terminal sequence in pIVCAT1  
  
 <400> 69  
 uuacgccccg ccc 13  
  
 <210> 70  
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 <212> RNA  
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 <223> Transcribed CAT gene terminal sequence in pIVCAT1  
  
 <400> 70  
 gugguauacc cagugauuuu uuucuccau 29  
  
 <210> 71  
 <211> 26  
 <212> RNA  
 <213> Artificial sequence  
  
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 <223> 3' nontranslated end of influenza A/PR/8/34 virus segment 8  
  
 <400> 71  
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